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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/742,930	12/23/2003	Jac Bum Kim	8733.997.00-US	9687

30827 7590 09/19/2006

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EXAMINER

PENG, CHARLIE YU

ART UNIT	PAPER NUMBER
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2883

DATE MAILED: 09/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/742,930	Applicant(s) KIM, JAE BUM	
	Examiner Charlie Peng	Art Unit 2883	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2006.
 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-15 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☒ Claim(s) 13-15 is/are allowed.
 6) ☒ Claim(s) 9-12 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☒ The drawing(s) filed on 23 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 30 August 2006 have been fully considered but they are not persuasive. Without specifically pointing out how the previous office action failed to teach or suggest any of the limitations of the claimed invention, applicant amended claims 9-12 to teach that each of the first and second light source unit has "at least one luminous element". Applicant further argued that the amended claims should be allowable. Firstly, there is a lack of disclosure for any luminous elements of the light source units (LEDs 62, 72, 83) described, but such features are inherent to any light emitting devices such as LEDs taught by the primary reference Yamashita et al. Secondly, the claim 9 was amended so that each optical fiber now surrounds a circumference of a light source unit/luminous element as opposed to optical fibers surrounding a light source unit previously claimed. However, this amended claim is still not considered patentable in view of newly cited reference to Parkyn Jr. et al. Please see 35 USC 103(a) rejection below for details.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 9, 10, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. PGPub 2004/0022050 to Yamashita et al. (also published as

WO0225167 on 28 March 2002) in view of U.S. Patent 5,806,955 to Parkyn, Jr. et al. Yamashita teaches, in a first embodiment illustrated in **Fig. 5**, a light source device having a light guiding plate **6**, two primary light sources **1** on both sides of the light guiding plate, and a reflecting plate **7** below the light guiding plate. Yamashita further teaches, in separate embodiments illustrated in Figs. 12 and 13, both an LED array **31** and means for transmitting light emitting from LED **30** using optical fibers **32**, which then makes the light incident on the light guiding plate **6**. The light source can be a self-emitting light source such as a cold-cathode tube, a fluorescent tube, an LED or an LED array. **([0082])** Yamashita teaches using optical fibers to couple light from the light source(s) but does not specifically state that each fiber surrounds the circumference of the light source units/luminous source. Parkyn, Jr. teaches a radiant energy redirecting system used for liquid-crystal display **1042** comprising an LED surrounded by both an planar waveguide **1025** (Fig. 29) and a tapered optical fiber **1069/1069b** (Figs. 32, 34) for the purpose of providing a means to collect and employ radiant energy in a very cost-effective and efficient manner. Since both the Yamashita reference and the Parkyn reference are from the same field of endeavor in light transmission for LCD, the purpose of using the feature of Parkyn's invention would have been recognized in the pertinent art of Yamashita's invention.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify Yamashita's invention by using an individual optical fiber surrounding an LED as taught by the Parkyn reference for the motivation of

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providing a means to collect and employ radiant energy in a very cost-effective and efficient manner. (Summary of Invention)

4. Claim 11 is rejected under 35 U.S.C. §103(a) as being unpatentable over Yamashita et al. and Parkyn Jr. et al. as applied to claim 9 above, and further in view of U.S. Patent 5,252,733 to Norman et al. Yamashita and Parkyn teach the backlight unit except for a particular type of glass that is used to create the optical fiber. Glass and plastic are two known materials used to mass-manufacture optical fibers. Norman et al. teach a usage of fluoride glass optical fibers. (**Column 1, lines 10-39**) It would have been obvious to one having ordinary skill in the art at the time the invention was made to use fluoride glass optical fibers, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416. The motivation would be to use the fluoride glasses as high transmittance optical fibers.

Allowable Subject Matter

5. Claims 13-15 remain allowed for reasons indicated in the previous office action.

Conclusion


6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charlie Peng whose telephone number is (571) 272-2177. The examiner can normally be reached on 9 am - 6 pm M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font can be reached on (571) 272-2415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Brian Healy
Primary Examiner